

DI Comb
CS Comb

wherein the transmitting means is further operative to wirelessly transmit said accessed second control signals from the broadcast medium to said first remotely controlled apparatus as second control signals to remotely control said second remotely controlled apparatus.

Please add the following new claim:

DI CS

41. (New) A method according to claim 1, wherein said second control signals are received from said broadcast medium in response to a request from said first remote control device.

REMARKS

In response to the Final Office Action mailed December 13, 2001, Applicant respectfully requests reconsideration. To further the prosecution of this application, amendments have been made to the claims, and the claims as presented are believed to be in allowable condition.

Claims 1 and 23-41 are pending in this application. Claims 1, 28, 32, 34, 36, and 37 have been amended herein and claim 41 is newly presented. Support for the subject matter of newly presented claim 41 is provided at page 11, the second full paragraph of Applicant's specification as originally filed. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "**MARKED-UP CLAIMS.**"

In paragraph 1 of the Office Action, claims 1, 23-25, 28, 32, and 33 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,817,203 to Tsurumoto et al.(hereinafter Tsurumoto). In paragraphs 2-4 of the Office Action, claims 26 and 27, claims 29-31, and claims 34-40 were rejected under 35 U.S.C. §103(a) as being unpatentable over Tsurumoto as applied to claim 1 and further in view of U.S. Patent No. 4,989,081 to Miyagawa et al. (hereinafter Miyagawa), U.S. Patent No. 6,088,355 to Mills et al.(hereinafter Mills), and U.S. Patent No. 5,081,534 to Geiger et al.(hereinafter Geiger), respectively. Applicant respectfully traverses these rejections.

1. Response to the Remarks Section of the Office Action

In the Remarks section of the Final Office Action, the Examiner asserted a number of different reasons for dismissing or vitiating many of the limitations recited in each of Applicant's

independent claims. For example, in point 2a of the Remarks section and with respect to independent claim 1, the Examiner asserted that because certain aspects of Applicant's claimed method were recited only in the preamble of this claim, they were given no patentable weight.

Claim 1 has been amended so that limitations that were previously recited in the preamble of claim 1 have now been moved to the body of this claim. Because these limitations are now positively recited within the body of claim 1, Applicant respectfully requests that the Examiner consider these limitations and accord them the weight they are due.

Further, to distinguish over the Examiner's interpretation (point 2a of the Remarks section) that the single remote control device (i.e., remote commander 8) of Tsurumoto becomes a second remote control device upon movement of the switch 21, each of independent claims 1 and 36 has been amended to recite that the second remote control device is distinct from the first remote control device. Because Tsurumoto only discloses a single remote commander 8 that controls all of the electronic appliances in Tsurumoto, independent claims 1 and 36, as now presented, clearly distinguish over Tsurumoto.

In point 2b of the Remarks section, and in response to Applicant's argument that Tsurumoto does not show the storing of second control signals in the first apparatus, the Examiner asserts that it is his position that "data necessary for 'code' conversion inherently includes the storage of second control signal[s] destined for the second device being controlled."

As stated in the Manual of Patent Examining Procedure (MPEP), "[i]n relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. (MPEP §2112, page 2100-52, Original Eighth Ed., Aug. 2001, emphasis in original.) Furthermore, as also stated in the MPEP, "the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." (Id., page 2100-51, emphasis in original.) Specifically, "[t]o establish inherency, the intrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" (Id.)

In the present situation, the only disclosure in Tsurumoto of how or what data necessary for the code conversion is stored in the memory 23 is the single sentence “[m]eanwhile, data necessary for such code conversion as described above are stored in the memory 23.” Applicant notes that although storing second control signals is one way in which the described code conversion of Tsurumoto may be achieved, there are other ways as well. For example, the code conversion data that is stored in the memory 23 of Tsurumoto could also simply be a conversion factor, which when applied to a first signal generates another signal. Accordingly, because there are ways other than the storing of second control signals to provide the functionality described in Tsurumoto, the assertion that the data necessary for code conversion “inherently” includes the storage of second control signals is improper and should be withdrawn.

In point 2c of the Remarks section, the Examiner states that the term “broadcast medium” has been given its broadest reasonable interpretation in light of Applicant’s specification. Applicant respectfully points out that all discussion of the broadcast medium in Applicant’s specification consistently uses this term to refer to a medium in which audio and or video information is transmitted and/or received from a media content provider, such as a radio or television broadcast station. For example, Applicant’s specification describes that the second control signals may be downloaded from a broadcast medium such as a satellite dish receiver or a fibre optic or other type of cable from a “cable provider”. (Page 5, first paragraph, page 9, first paragraph, page 10, first full paragraph, page 15, third full paragraph, and page 16, second full paragraph). Each of these references to a broadcast medium is used in its ordinary dictionary meaning to refer to a medium over which media content, such as radio (audio) or television (video and audio) broadcast signals, is provided. The attached pages from Webster’s Encyclopedic Unabridged Dictionary of the English Language and the McGraw-Hill Dictionary of Scientific and Technical Terms support the usage of this term as used in Applicant’s specification.

To overcome the Examiner’s broad interpretation of the term “broadcast medium” as reading on any wires that are used to program the memory 23 of Tsurumoto, Applicant has amended each of independent claims 1, 32, and 36 to positively define the intended meaning of this term within each claim. For example, claim 1 now defines the term broadcast medium as one which provides at least one of audio and video signals from a media content provider. As

such a definition is clearly supported by Applicant's usage of this term in the specification, by the ordinary dictionary meaning of this term, and by its usage in the relevant art, no new matter is believed to have been added. Applicant notes that even if the use of wires to program the memory 23 of Tsurumoto were inherent in the disclosure of Tsurumoto (and Applicant points out that nowhere is the use of wires to program the memory 23 even addressed in Tsurumoto), Tsurumoto clearly does not disclose, teach, or suggest the use of second control signals received from a broadcast medium as now recited in each of independent claims 1, 32, and 36. Accordingly, claims 1, 32, and 36 are believed to patentably distinguish over Tsurumoto for at least this reason.

In point 2d of the Remarks section, the Examiner asserted that Applicant's arguments appear to allege that the claims "require some wireless communication of the second control signals from the first to the second apparatuses." To further clarify that the claimed embodiments of Applicant's invention do include wireless communication of the second control signals to the second apparatus, each of claims 1, 32 and 36 have been amended to positively recite this aspect of Applicant's invention. For example, in claim 1, this aspect of Applicant's invention is positively set forth by reciting a step of "wirelessly transmitting said accessed second signals from said first apparatus to said second apparatus to remotely control said second apparatus responsive to selected ones of said first control signals received from said first remote control device." Similar language is used in independent claims 32 and 36. This aspect of Applicant's invention is supported throughout the specification, for example at page 15, first full paragraph as well as elsewhere. Because the electronic appliance of Tsurumoto uses a connecting line or bus 17 to transmit such control signals, this aspect of Applicant's invention clearly distinguishes over Tsurumoto.

In point 2e of the Remarks section, the Examiner indicated that Applicant's arguments against the combination of Tsurumoto and Miyagawa was not persuasive. Specifically, the Examiner asserted that Tsurumoto does not expressly teach or suggest having no additional "second" apparatuses being controlled over a bus, and therefore cannot be considered to teach away from the teachings of Miyagawa. Applicant agrees with the Examiner that Tsurumoto does not expressly teach away from additional "second" apparatuses being controlled over a bus, but this is not the basis for Applicant's argument against the combination of Tsurumoto and

Miyagawa. Tsurumoto expressly teaches the elimination of switch 21 on a remote controller “without increasing the number of operating keys on the commander” (i.e., the remote control). (Col. 4, lines 14-21.) Indeed, Tsurumoto discloses that a control signal of the same code is sent from the remote commander 8 to control similar functionality (e.g., play) on different devices (e.g., a VTR or a Video Disk Player). (Col. 3, lines 28-35., emphasis added) In contrast, Miyagawa explicitly teaches the provision of additional keys on a remote controller to “control all of the apparatus, such as the television receiver 6, the video tape recorder 10, the video disk player 13 and the like”, even if many of the keys have similar functionality (e.g., the play or pause function of a video tape recorder or a video disk player (col. 5, lines 40-46)). Miyagawa expressly teaches that control of similar functions on different apparatus is achieved through the use of a unique code that is sent by the remote control device that includes an apparatus address code and a function code, and this is specific to a particular function of a particular device. (Col. 5, lines 43-46.) Applicant respectfully asserts that the explicit teachings of Tsurumoto (eliminating the switch 21 without increasing the number of keys on the remote controller, and using the same code for similar functions on different devices) teach away from combination with Miyagawa, as Miyagawa teaches providing separate keys for every function of each device that is to be controlled, and providing a unique signal or code for each function of each device.

2. Claims 1 and 32 Patentably Distinguish Over Tsurumoto

Claim 1 is directed to a method of controlling a first and a second remote controlled apparatus. The method comprises steps of receiving, at said first apparatus, first control signals that are associated with a first remote control device, said first apparatus being operatively responsive to said first control signals and to signals received from a broadcast medium that provides at least one of audio and video signals from a media content provider; receiving, at said first apparatus, second control signals from said broadcast medium that are associated with a second remote control device that is distinct from the first remote control device, said second apparatus being operatively responsive to said second control signals; storing said second control signals in said first apparatus; accessing said stored second control signals responsive to selected ones of said first control signals; and wirelessly transmitting said accessed second control signals from said first apparatus to said second apparatus to remotely control said second apparatus

responsive to selected ones of said first control signals received from said first remote control device.

Claim 1 patentably distinguishes over Tsurumoto for a number of reasons. First, and as noted above, Tsurumoto does not disclose or suggest a second remote control device that is distinct from the first remote control device as now recited in claim 1. Second, and more significantly, Tsurumoto does not disclose, teach, or suggest steps of receiving, at said first apparatus, second control signals from said broadcast medium that are associated with a second remote control device and storing those second control signals in said first apparatus as recited in claim 1. As noted in Applicant's specification at page 6, top paragraph, page 7, second full paragraph, page 10, first full paragraph, and page 15, third and fourth full paragraphs, this ability to receive second control signals from the broadcast medium and store those control signals in the first apparatus permits multiple apparatus to be controlled by a single remote control device, irrespective of when the various apparatus were purchased or otherwise received. For example, the programming of code conversion data that is stored in the appliance of Tsurumoto is static with regard to when that programming was performed. Although the appliance of Tsurumoto may be programmed to recognize and convert control codes of known apparatus, it can not be modified to control devices that were developed after that programming, as the conversion data necessary for use with the after developed device would not have been available at the time of programming. Indeed, this drawback with such conventional technology is noted in Applicant's specification at page 2, last full paragraph.

In contrast to Tsurumoto, the ability to receive second control signals from a broadcast medium and then store those control signals for use in controlling a second apparatus permits current as well as after developed devices to be controlled. As Tsurumoto does not disclose, teach, or suggest steps of receiving second control signals from a broadcast medium and storing those control signals in the first apparatus, claim 1 patentably distinguishes over Tsurumoto. Further, as none of the other references (Miyagawa, Mills, or Geiger) disclose, teach, or suggest this aspect of Applicant's invention, claim 1 patentably distinguishes over Tsurumoto, Miyagawa, Mills, and Geiger alone and in combination.

In further contrast to Tsurumoto, claim 1 recites a step of wireless transmitting said accessed second control signals from said first apparatus to said second apparatus to remotely

control said second apparatus responsive to selected ones of said first control signals received from said first remote control device. As the appliance of Tsurumoto uses a connecting line or bus 17 to transmit control signals to the various other devices, claim 1 further distinguishes over Tsurumoto. Accordingly, because Tsurumoto fails to disclose, teach, or suggest all the limitations recited in claim 1, claim 1 patentably distinguishes over Tsurumoto, and the rejection of claim 1 under 35 U.S.C. §102(b) should be withdrawn.

Claims 23-31 and 41 depend either directly or indirectly from claim 1 and patentably distinguish over Tsurumoto, as well as Miyagawa, Mills, and Geiger for at least the same reasons.

Claim 32 is directed to a remotely controlled apparatus. The remotely controlled apparatus comprises first receiving means for receiving first control signals from a first remote control device and second receiving means for receiving signals from a broadcast medium that provides at least one of audio and video signals from a media content provider, said signals from the broadcast medium including second control signals that are associated with a second remotely controlled apparatus that is operatively responsive to said second control signals. The remotely controlled apparatus further comprises storage means for storing said second control signals, control means for accessing said stored second control signals responsive to selected ones of said first control signals thus obtaining accessed second control signals, and transmitting means for wirelessly transmitting said accessed second control signals to said second remotely controlled apparatus to remotely control said second remotely controlled apparatus. The transmitting means is further operative to wirelessly transmit said accessed second control signals received by said second receiving means from the broadcast medium to said second remotely controlled apparatus as said second control signals, to remotely control the second remotely controlled apparatus.

Claim 32 is not anticipated by the disclosure of Tsurumoto for many of the same reasons as claim 1. For example, nowhere does Tsurumoto or any of the other cited references disclose, teach, or suggest second receiving means for receiving signals from a broadcast medium that provides at least one of audio and video signals from a media content provider, said signals from the broadcast medium including second control signals that are associated with a second remotely controlled apparatus that is operatively responsive to said second control signals. Nor

does Tsurumoto or any of the other cited references disclose, teach, or suggest storage means for storing said second control signals as recited in claim 32. Moreover, nowhere does Tsurumoto disclose, teach, or suggest transmitting means that is further operative to wirelessly transmit said accessed second control signals received by said second receiving means from the broadcast medium to said second remotely controlled apparatus as said second control signals, to remotely control the second remotely controlled apparatus as recited in claim 32. Accordingly, as Tsurumoto fails to disclose, teach, or suggest all the limitations presently recited in claim 32, claim 32 patentably distinguishes over Tsurumoto alone and in combination with Miyagawa, Mills, and Geiger.

Claims 33-35 depend either directly or indirectly from claim 32 and patentably distinguish over Tsurumoto, Miyagawa, Mills, and Geiger for at least the same reasons.

3. Claim 36 Patentably Distinguishes Over Tsurumoto and Geiger

In paragraph 4, claim 36 was rejected under 35 U.S.C. §103(a) as being unpatentable over Tsurumoto as applied to claims 1 and 32 and further in view of Geiger.

Geiger is directed to a television receiver having a remote control system capable of controlling associated peripheral devices manufactured by different companies. The television receiver “performs a ‘learning process’ in which it learns the previously unknown codes for various functions of a peripheral device from the remote control transmitter supplied by the manufacturer of the peripheral device and stores them.” (Col. 2, lines 22-27.) After the learning process, “when the remote control signal for a particular function of the peripheral device is received from a ‘unified’ remote control transmitter supplied by the manufacturer of the television receiver, the television receiver automatically converts the code (which is not suitable for the peripheral device) of the received remote control signal into a new code, suitable for controlling the respective function of the peripheral device.” (Col. 2, lines 30-40.) Thus, the television receiver serves as a receiving, translation and relay station for the remote control signal sent by the unified remote control transmitter (col. 2, lines 55-61).

Claim 36 patentably distinguishes over the combination of Tsurumoto and Geiger. As recited in claim 36, the first remotely controlled apparatus wirelessly transmits said second control signals to said second remotely controlled apparatus based upon signals received from

the broadcast medium. This aspect of Applicant's invention is nowhere disclosed, taught, or suggested in either Tsurumoto or Geiger. For example, Tsurumoto discloses that the data necessary for the code conversion is simply stored in the memory 23, but no details of how or from where this code conversion data is received are even addressed (see col. 3, lines 41-42). Even if the programming of the memory 23 of Tsurumoto was inherently performed using wires, there is absolutely no disclosure, teaching or suggestion in either Tsurumoto or Geiger that second control signals be based upon the signals received from the broadcast medium. Moreover, as clearly described in Tsurumoto at col. 3, lines 50-53, the television set 4 transmits the converted code signals to the VTR 5 via a connecting line or bus 17, and therefore does not "wirelessly transmit said second control signals" as recited in claim 36. Similarly, although Geiger does disclose first and second remotely controlled apparatus, each being operatively responsive to respective control signals, Geiger discloses that the signals that are used to control the second apparatus are learned from its associated remote control, and not received from a broadcast medium as recited in claim 36. Accordingly, because neither Tsurumoto nor Geiger alone or in combination discloses, teaches, or suggests all of the limitations of claim 36, the rejection of claim 36 under 35 U.S.C. §103(a) over Tsurumoto in view of Geiger should be withdrawn.

Claims 37-40 depend either directly or indirectly from claim 36 and patentably distinguish over the combination of Tsurumoto and Geiger for at least the same reasons.

CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believed, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge the deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

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MARKED UP CLAIMS

1. (Thrice Amended) A method of controlling a first and a second remote controlled apparatus[, said first apparatus being operatively responsive to first control signals associated with a first remote control device and signals from a broadcast medium, and said second apparatus being operatively responsive to second control signals associated with a second remote control device, the method] comprising [the following] steps of:

receiving, at said first apparatus, first control signals that are associated with a first remote control device, said first apparatus being operatively responsive to said first control signals and to signals received from a broadcast medium that provides at least one of audio and video signals from a media content provider;

receiving, at said first apparatus, second control signals from said broadcast medium that are associated with a second remote control device that is distinct from the first remote control device, said second apparatus being operatively responsive to said second control signals;

storing said second control signals in said first apparatus;

[receiving said first control signals from said first remote control device at said first apparatus;]

accessing said stored second control signals responsive to selected ones of said first control signals; and

wirelessly transmitting said accessed second control signals from said first apparatus to said second apparatus[, wherein said first apparatus] to remotely [controls] control said second apparatus responsive to selected ones of said first control signals received from said first remote control device[; and

receiving, at said first apparatus, signals from the broadcast medium which are transmitted to said second apparatus as second control signals to remotely control said second apparatus].

28. (Twice Amended) A method according to claim 1, wherein said second control signals are received from said broadcast medium in response to a request from said first apparatus [from said second remote control devices].

32. (Twice Amended) A remotely controlled apparatus, [operatively responsive to first control signals and signals from a broadcast medium] comprising:

first receiving means for receiving [said] first control signals from a first remote control device [and second receiving means for receiving said signals from the broadcast medium];

second receiving means for receiving signals from a broadcast medium that provides at least one of audio and video signals from a media content provider, said signals from the broadcast medium including second control signals that are associated with a second remotely controlled apparatus that is operatively responsive to said second control signals;

storage means for storing said second control signals [associated with a second remotely controlled apparatus operatively responsive to said second control signals];

control means for accessing said stored second control signals responsive to selected ones of said first control signals thus obtaining accessed second control signals; and

transmitting means for wirelessly transmitting said accessed second control signals to said second remotely controlled apparatus[, whereby said remotely controlled apparatus] to remotely [controls] control said second remotely controlled apparatus;

wherein the transmitting means is further operative to wirelessly transmit said accessed second control signals received by said second receiving means from the broadcast medium to said second remotely controlled apparatus as said second control signals, to remotely control the second remotely controlled apparatus.

34. (Twice Amended) The remotely controlled apparatus of claim 32, wherein said first receiving means is further operative to receive [receives] said second control signals from a second remote control device associated with said second remotely controlled apparatus.

36. (Twice Amended) A remote control system comprising:

a first remotely controlled apparatus operationally responsive to first control signals associated with a first remote control device and to signals [associated with] received from a broadcast medium that provides at least one of audio and video signals from a media content provider; and

a second remotely controlled apparatus operatively responsive to second control signals associated with a second remote control device that is distinct from the first remote control device;

wherein said first remotely controlled apparatus wirelessly transmits said second control signals[,] to said second remotely controlled apparatus based upon said signals received from the broadcast medium to remotely control said second remotely controlled apparatus[,] responsive to selected ones of said first control signals [as selected by said second control signals; and

wherein said first remotely controlled apparatus transmits said signals associated with the broadcast medium, to remotely control said second remotely controlled apparatus].

37. (Twice Amended) The remote control system of claim 36 wherein said first remotely controlled apparatus comprises:

first receiving means for receiving said first control signals from said first remote control device and second receiving means for receiving said signals from the broadcast medium;

storage means for storing said second control signals associated with said second remotely controlled apparatus operatively responsive to said second control signals;

control means for accessing said stored second control signals responsive to said selected ones of said first control signals; and

transmitting means for wirelessly transmitting said accessed second control signals to said second remotely controlled apparatus, whereby said first remotely controlled apparatus remotely controls said second remotely controlled apparatus;

wherein the transmitting means is further operative to wirelessly transmit said accessed second control signals from the broadcast medium to said first remotely controlled apparatus as second control signals[,] to remotely control said second remotely controlled apparatus.